

Monterey Bay National Marine Sanctuary
Advisory Council

RESEARCH ACTIVITY PANEL

Meeting Minutes

Friday, May 10, 1996
9:00 AM-12:00 PM
Monterey Bay Aquarium
Ocean View Conference Room

I. INTRODUCTION OF MEMBERS AND PARTICIPANTS

a) Members in Attendance

Rick Starr, U.C. Sea Grant - Vice Chair
Andrew DeVogelaere, MBNMS - Research Coordinator

George Boehlert, NOAA/NMFS/PFEG
Jane Caffrey, ESNERR and Foundation
Steve Eittreim, USGS
Chris Harrold, Monterey Bay Aquarium
Terry Jackson, MBNMS
Deborah Johnston, CA DFG/Monterey
Caroline Pomeroy, UCSC/CSUMB
Don Potts, UCSC
Dennis Powers, Hopkins Marine Station
Jennifer Nielson, Hopkins Marine Station (Alternate)
Leslie Rosenfeld, Naval Postgraduate School
Mark Stephenson, CDFG/Marine Pollution Studies Lab
Geoff Wheat, NOAA/NURP

b) Members not in Attendance

Greg Cailliet, MLML
Tami Grove, CA Coastal Commission
Jim Harvey, MLML
Patricia Port, Department of the Interior
Bruce Robison, MBARI
Jim Rote, CSUMB
Gary Sharp, CIRIOS
Karen Worcester, Morro Bay Foundation

c) Special Guests in Attendance

Korie Johnson, U.C. Sea Grant/MLML
Randy Kochevar, Monterey Bay Aquarium
J. Patton
Jo Guerrero, MLML
Rikk Kvitek
Tom Neal, Pelagic Shark Research

II. CALL TO ORDER

The meeting was called to order by the Vice-Chair, Rick Starr, at 9:03 AM.

Dr. Caroline Pomeroy, from University of California, Santa Cruz and California State University, Monterey Bay, was introduced as a new Member At-Large of the RAP. Caroline will represent the field of social sciences.

III. CONSENT ITEMS

Approval of the previous meeting minutes was moved to the end of the agenda to allow more time for RAP members to review them.

IV. PRESENTATIONS/DISCUSSIONS

a) Recent developments at the Monterey Bay Aquarium (C. Harrold)

Chris Harrold briefed RAP members on recent developments at the Monterey Bay Aquarium. His report focused on the Aquarium's research and education programs, and the Outer Bay exhibit that opened to the public on March 2, 1996. Highlights of the presentation follow:

- Public education has been the Monterey Bay Aquarium's primary mission; scientific research has also been a part of the mission, but secondary;
- Historically, there were four research priorities for the Monterey Bay Aquarium: 1) in-house, exhibit related biological research; 2) field study of kelp ecological physiology; 3) field study of kelp forest community dynamics; 4) field study of sea otter social organization, reproductive behavior, and foraging tactics;
- The Monterey Bay Aquarium Research Institute was established to focus on deep sea research so as not to interfere or take away from the primary mission of the Aquarium;
- In 1990 the Monterey Bay Aquarium's Board of Directors recommended that research at the Aquarium should be more tightly coupled with the exhibits and the conservation message. To meet the directives, three criteria for research must be met: 1) the research must contribute to conservation or to an Aquarium exhibit in some way; 2) it must capitalize on what the Aquarium has to offer including living collection and life support systems and expertise in life support systems, animal care and husbandry; and 3) to engage in research opportunities where the Aquarium can take a leadership role;
- The Aquarium is currently focusing on three main areas: 1) Tuna Research and Conservation; 2) Sea Otter Research and Conservation; 3) Development of husbandry methods for deep sea organisms;
- The Deep-Sea exhibit is scheduled to open in the Year 2000 on the first floor of the new wing. The exhibit is expected to have a strong live animal component. Randy Kochevar, Monterey Bay Aquarium, and his team are developing a system to maintain midwater animals;
- Education programs at the Aquarium include the volunteer training and interpretive programs; the new visitor program which will help visitors have a better time and to teach them more about the marine environment; new membership education programs; student and youth programs; internship programs; educator programs;
- The Aquarium is working to reach audiences beyond its walls through use of the internet and the Virtual Canyon project. A major initiative to update the MBA home-page is in progress.

b) Status Report and RAP input on the MBNMS Site Characterization (J. Guerrero)

Jo Guerrero from Moss Landing Marine Labs, provided the RAP with a status report on the Site Characterization project. She extended the project team's gratitude to the Sanctuary for supplementing the funding to allow the project to be available via the internet. The site characterization is expected to be available to RAP members for review during the week of May 15. All RAP members are encouraged to visit the site and provide specific comments on how the product can be improved. The site characterization will be available to the public by mid-June. The primary audience for the project will be resource managers and scientists.

Features of the site characterization project include:

- A Table of Contents with hot-links to the appropriate sections;
- A Sanctuary Bibliography which will help the visitor find references listed in the text;
- A section referred as ENDNOTE, to help search for bibliographic references;
- Labels to allow visitors to contact the person who provided the material in the project -- Jo proposed that the labels be erased so that contributors to the project are not inundated with calls and messages from members of the general public visiting the web-site. However, the Sanctuary should keep a secret label file so that the project's authors can be reached when necessary.

Still to be added to the characterization are:

- a section on historical and cultural resources;
- a section on the Water Quality Protection Program.

Associated with the project is a book about the characterization of the MBNMS produced by the Monterey Bay Aquarium and the MBNMS. The publication is scheduled to be released at the end of the year.

c) Lesions on Fish in Monterey Bay; results from the Fort Ord Study (K. Johnson)

Korie Johnson, U.C. Sea Grant Extension Program and Moss Landing Marine Lab, presented a report on her work concerning lesions found on flat fishes in Monterey Bay. The research considered the abundance and distribution of flat fish with the lesions in three major sampling areas: the Pajaro River Mouth; the Salinas River Mouth; and the Fort Ord Former Restricted Zone.

The percentage of Dover Sole with lesions was about 5%; no difference in the abundance of Dover Sole with the lesions was found between the three sampling areas. Collected samples were sent to the Smithsonian Institution for analysis and were diagnosed as external single cell protozoan parasites. These lesions seem to affect the fish in the first year of life only; occurrences of the lesions appear to diminish in older, larger fish. There is no known reason for the lesions; chemicals and/or pollution are not thought to be the cause. The lesions have been documented on Dover Sole in other areas of California.

Lesions found on English Sole are of a very different nature, and are believed to be associated with pollution. Korie and others are trying to obtain more samples from both inside and outside Monterey Bay to help determine environmental influences on the fish. Characteristics of the tumors in English Sole are opposite of those found on the Dover Sole; i.e., tumors increase with the size of the fish.

Korie would like to publish a report on her work when more research is available and to present the report to the Army in October.

V. DISCUSSION ITEMS

a) Review of the April 1996 SAC meeting (R. Starr)

Rick Starr reported from Greg Cailliet's notes on the April 26, 1996 Sanctuary Advisory Council meeting. Highlights of the report included:

- A discussion about kelp harvesting in the Sanctuary; there were presentations from local harvesters, a representative of the NutraSweet Kelco Company, the California Department of Fish and Game, Nicole Crane from Hopkins Marine Station, and Michelle Knight from Adventures-by-the-Sea. A gentlemen's agreement to work together to protect the kelp beds and self-regulate harvesting practices was arrived at among the local harvesters. The SAC concluded that there wasn't enough information about the resource to make any policy decisions at this time and requested a progress report from the local harvesters at the June meeting.
- SAC members heard testimony from members of the public concerned about changes in the MBNMS management of the territory north of the San Mateo County Border. The SAC identified a task force to investigate and provide input about the issue to NOAA's Sanctuaries and Reserves Division. Greg suggested that the MBNMS come up with a management plan that provides for more representation of the northern region.
- David Iverson was sworn in as the new Citizen At-Large member of the SAC. David is an active member of the Conservation Working Group and a resident of Half Moon Bay. He is a long time supporter of the Sanctuary and its programs.
- Karin Strasser Kauffman was re-elected as Chair; David Iverson was elected as the new Secretary.

b) National Marine Sanctuary (NMS) Research Reports (A. DeVogeleare/J. Roletto)

1) Andrew reported the following:

- Institutional permits -- the MBNMS has sent a proposal regarding permit classification to SRD, based upon the e-mail responses from RAP and SEP members; telephone interviews with active research scientists; a review of past research permits; and the MBARI status reports. The MBNMS is to become the test site for the new permit classification system.
- Research proposals -- Andrew has been compiling unsolicited research proposals received by the Sanctuary office -- he suggested that they be sent to select subject experts of the RAP for review and comments.
- Graduate Student Stipend -- There has been a great deal of interest in the graduate student stipends. At this time, only one student can be supported unless the unsolicited research proposals are not of the quality the Sanctuary wants to support.

- Update on the Trinity grounding -- There was apparently very little effect from the diesel fuel spill, but significant injury from where the hull ran ashore. The wreck was removed by crane after rolling it up the shore, using tractor tires as bumpers. This was a good exercise in cooperation between MBNMS, CDFG/OSPR, and the CA Coastal Commission. Funds from the owner's insurance company will support a monitoring/recovery study.
- McArthur Cruise -- Finalizing the cruise plan has been a complex process, and there will be four legs between May 21 and June 9.
- Beach Monitoring Program -- Andrew is working with others to develop a beach monitoring program to regularly assess the state of the Sanctuary's beaches. Researchers will observe and collect data that will become the basis for a long-term data set from which natural patterns about the area can be determined. The program is in conjunction with OSPR and MLML.
- RAP Database -- Every RAP member now has a 'hot-link' between the MBNMS Homepage and that of their institutions.
- AAAS Symposium -- June 23-27, 1996. There will be a session on research in Sanctuaries and Reserves. For more information, contact Gary Sharp.
- Proposed Underwater Park -- RAP members requested that the Sanctuary designate a staff member to follow the proposal's progress. The RAP was concerned that the proposal seems to be moving through the process without adequate notification to the research community. There is a danger that research interests may not be considered. Andrew indicated that he would bring the issue up for discussion at the next Sanctuary staff meeting. RAP members decided that it would be worthwhile for them to be proactive in making a formal statement that this study could have an impact on the research activities along the central coast. The Sanctuary should be asked what its legal role and responsibility in this matter would be and that everyone involved act with the larger picture in mind.

2) Jan Roletto, GFNMS/CBNMS/Northern MBNMS sent a written report; it is recorded as received.

- We have selected our Coastal Bird Intern for 1996. His name is Tom Ryan and he is completing his MS at Long Beach State University this spring. He will be with us for seven months and will work on making our beached bird and mammal data compatible with the 14 year data set from PRBO, conduct several surveys to determine seasonal and site specific retention rates for beached birds (this will be useful for NBS, NRDA and OSPR), and co-author a paper on oiling rates of seabirds along the central California coast. Tom is also interested in teaching our volunteers coastal bird I.D.
- The EA is out for the Alternative Source Transmission (AST) tests. SRD is probably going to request an amendment to the ATOC permit, because the AST tests will disrupt the ATOC tests and monitoring.
- Overflights below 1000' are now being monitored by USFWS and the Sanctuaries for disturbance, especially Common Murre and cormorant colonies which are in decline along the Big Sur coast. The CINMS is also interested in the monitoring protocols and the information obtain from the ground observations.

c) Follow-up Report - Effects of ROV Lights on Deep Sea Fish (R. Kochevar)

At the April 1996 RAP meeting, concerns were raised about the possible negative impacts that lights from remotely operated vehicles (ROVs) may have on the eyes of deep sea fishes. RAP members decided that an investigation into the subject

might be warranted and Randy Kochevar was asked to lead a special subcommittee to explore the issue further.

Randy reported briefly that the available literature dealt mostly with lights from trawlers and sunlight exposure; research on impacts from lights of the same intensity as those used by ROVs is not prolific. Randy indicated that he will try to put together a realistic assessment of how much light an ROV does produce and determine its sphere of influence. In this way, it may possible for him to gain an idea of how many species are impacted and to what degree. His argument was, not only is there concern for the light having a negative impact on the eyes of the fish an ROV encounters, but also how do the lights change the normal behavior of the species.

Some RAP members indicated that, in the worst case scenario, the possible impacts from the lights is minor, and shouldn't curtail research efforts. However, an investigation into the impacts of light is needed for scientists and the public. To avoid misinformation on the subject, the RAP requested that Randy prepare a report to present to the Sanctuary Advisory Council.

VI. SPECIAL SHORT DISCUSSION ITEMS

a) Fort Ord offshore studies (S. Eittreim, K. Johnson, M. Stephenson)

Funding has not yet been received for the contaminant analyses. Also see agenda item above regarding the lesions on fish in Monterey Bay.

b) NURP deep sea research workshop (G. Wheat)

The West Coast National Undersea Research Center's workshop for science in Monterey Bay will be held at MBARI on Thursday May 16 and Friday May 17. Please contact Geoff Wheat if you have questions (408-633-7033 or wheat@mbari.org)

c) Mussel Watch Update (M. Stephenson)

The Mussel Watch Bill is still going through committees.

d) Elephant Seal population growth at Pt. Piedras Blancas (A. King/J. Harvey)

The MBNMS office is coordinating with NMFS in Long Beach and the California Resources Agency to scope out a "Northern Elephant Seal Management Plan" which would have subsections on dealing with specific sites such as Piedras Blancas, etc. The first phase will probably be a workshop that will include all the trustee agencies, with invitations to selected academics, to outline the depth and breadth of the Management Plan. More on this soon....

e) Permit Report (S. Kathey)

A Permit Report was provided at the meeting. For questions on the report contact Scott Kathey at 647-4251.

VII. ANNOUNCEMENTS

1) There will a Mother's Day celebration at Elkhorn Slough National Estuarine Research Reserve.

VIII. OTHER ITEMS

a) Items for Future Meetings

- ROV Light issues
- Sanctuary response to the Underwater park proposal
- Update on the McArthur Cruise

b) Approval of the previous meeting minutes

The previous meeting DRAFT minutes were approved as amended.

The next RAP meeting is on Friday, June 7 at the Naval Postgraduate School (NPS) in the Glasgow Building -- directions will be e-mailed prior to the meeting.

The meeting adjourned at 11:45 a.m.

Respectfully submitted,

Jane M. DeLay
MBNMS Advisory Council Coordinator

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DRAFT Minutes